

LETTER TO SHAREHOLDERS

March 2021

Dear BioSig Shareholder,

Despite the economic challenges that the prior year has brought, 2020 was a strong year for BioSig. We achieved our first commercial sales, strengthened our balance sheet, and launched new product development initiatives.

This year, 2021, has started on an equally strong note. Commercialization, innovation, and growth remain at the forefront of our strategic priorities as we expand our clinical footprint and strengthen our product positioning and service offerings.



More than 580 patient cases have been conducted using our PURE EP™ System by 38 physicians in eight clinical sites to date.

Our technology offers a novel way to acquire and process cardiac signals. These are essential diagnostic signals that deliver high clinical value in all types of cardiac catheter ablations.

Our NeuroClear division has also advanced its operations. The Company launched a development plan for a novel nerve mapping and stimulation technology, N-SENSETM, conducted its first preclinical studies, and was

recently awarded the first patent exclusively licensed from the Mayo Foundation for Medical Education and Research. Our goal is to develop new intellectual properties and products, including new hardware, software, and algorithmic solutions, to address a rapidly growing neurostimulation device market.

In 2020, we raised a total of \$38 million. All proceeds from these raises and the additional proceeds from warrant exercises in 2020 are presently expected to be used to support our commercialization strategy and development of new products to complement our product offering.

COMMERCIAL SALES AND ACCELERATED PURE EP ADOPTION

According to Grand View Research, Inc., the global electrophysiology devices market size is expected to reach \$12.2 billion by 2026, expanding at a CAGR of 11.70% over the next five years.¹

As a direct result of our team's rigorous efforts to install our flagship PURE EPTM System in leading medical centers across the nation, we believe that we are well on our way to expand these installations and convert them to commercial sales.

Just months ago, we completed our first commercial sale of three PURE EP™ Systems to St. David's HealthCare of Austin, Texas, an



EP team at Memorial Hospital of South Bend, Indiana

¹ Electrophysiology Devices Market Size Worth \$12.2 Billion By 2026; GrandViewResearch, September 2019





HCA Healthcare-owned hospital. As our clinical footprint grows, so does the demand for the evaluative installations for our technology.

To address this growing interest, we have switched to a new 90-day evaluation cycle, which should enable hospitals to more rapidly assess the PURE EPTM in clinical settings. The wealth of knowledge that our clinical team has acquired in the past twelve months allows us to showcase the benefits of the PURE EPTM in a broad range of clinical scenarios, which is a foundation for healthy commercial growth. In February, we announced that we would be installing the PURE EPTM at the New York-Presbyterian/Weill Cornell Medical Center, Michigan Medicine-University Hospital, and Houston Methodist Hospital. It is worth noting that the New York Presbyterian and Michigan Medicine-University Hospital maintain two of the



EP lab at Houston Methodist Hospital, Texas

most extensive electrophysiology programs in the country. We are thrilled to add them to our evaluation base.

Some of our latest additions, such as Memorial Hospital of South Bend, Indiana, and Deborah Heart and Lung Center in Brown Mills, New Jersey, have quickly become valuable evaluation partners. Dr. Raffaele Corbisiero and Dr. Pedram Kazemian of Deborah Heart and Lung Center have recently shared their experience working with the PURE EPTM in an interview published by EP Lab Digest. They spoke about the seamless integration of the PURE EPTM into their clinical practice and how our technology is already contributing to their procedural efficiency.

One of the definite highlights in our corporate history was the invitation to be featured in EPLive 2020 - an intensive, two-day educational meeting for practicing clinical cardiac electrophysiologists, electrophysiology fellows, and general cardiologists interested in treating complex arrhythmias. During this event, held virtually in December last year, the PURE EP™ was highlighted in several patient cases conducted by Andrea Natale,



M.D., F.H.R.S., F.A.C.C., F.E.S.C., Executive Medical Director of Texas Cardiac Arrhythmia Institute and EPLive Course Director, and Joseph Gallinghouse, M.D. These cases were broadcast live from the Electrophysiology Center at St. David's Medical Center in Austin, TX, to an audience of over 800 attendees.

Our team was back on the virtual podium after a quick respite over the festive season when our technology was featured in EP Lab Digest's January issue. The editorial, authored by the Editor-in-Chief Bradley P. Knight, M.D., F.A.C.C., F.H.R.S., highlighted several challenges in modern electrophysiology and how the PURE EP™ System addresses these limitations.

A few weeks later, our technology was featured in the Spotlight session during the 26th Annual International AF Symposium. Dr. Joseph Gallinghouse, one of our most experienced physician users from Texas Cardiac Arrhythmia Institute, spoke about the advantages he observed when using the PURE EP™ System in complex arrhythmia cases, including identifying an arrhythmia ablation target via an interesting low amplitude signal from the PURE EP™ that the other systems in the lab didn't capture. The full recording of Dr. Gallinghouse's presentation, which over 500 attendees viewed, and the articles mentioned above, are available on our website under PURE EP / Physician Insights.





Our clinical operations have remained virtually uninterrupted throughout most of 2020 and the first quarter of this year. We are looking forward to reporting on more progress and clinical findings later this year.

SCALING CLINICAL DISCOVERIES WITH ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

We strive to remain at the forefront of innovation. In early February, we announced a new strategic initiative we are launching with the Mayo Foundation for Medical Education and Research to develop a next-generation Al- and machine learning-powered software for our PURE EPTM System. Looking further into the future, we plan to combine the cardiac signal data that we are acquiring with the PURE EPTM with the signals from other sources.



The signals that our system acquires demonstrate new diagnostic information that was not available before. Combining our signals with the high-quality data from other biomarkers, for example, nerve signals may present us with opportunities to uncover new clinical applications and even develop new therapies. Scaling these opportunities with Al-based applications may allow us to bring new technological solutions to the broader audience of physicians.

This program marks an exciting new chapter for BioSig. Having access to the wealth of clinical knowledge generated by Mayo Clinic allows us to accelerate the R&D process and advance these next-generation technologies to improve patient care further.

The global market for AI in healthcare is expected to grow to USD 45.2 billion by 2026 at an estimated CAGR of 44.9%.² We believe that integrating the AI- and machine learning-powered solutions into the PURE EP™ System will be a significant step towards better patient outcomes and improved efficiency of procedures.

AUGMENTED REALITY FOR REMOTE SERVICING

One of the main challenges of 2020 was the ongoing COVID-19-related travel restrictions. The ability to seamlessly continue clinical field operations and provide the best service to our customers and partners is paramount. To combat the ongoing uncertainties surrounding travel, we deployed Vuzix M400 Smart Glasses to support the rollout of the PURE EP™.

Vuzix has a strong record of successfully providing remote solutions to the world's most innovative companies worldwide, including Johns Hopkins, Verizon, and countless others that depend on Vuzix's technology to connect them to the outside world and keep business going as usual amid the pandemic. Our primary goal is to elevate the standard of care in the electrophysiology market. As the electrophysiology market continues to grow year-over-year, we



BioSig Deploys Vuzix M400 Smart Glasse

² Artificial Intelligence in Healthcare Market with Covid-19 Impact Analysis by Offering, Technology, End-Use Application, End User and Region – Global Forecast to 2026; Markets and Markets





can continue our efforts with remote servicing intended to enable installations, upgrades, and training during COVID-19 and beyond.

Not only does this new initiative save time, but the M400 Smart Glasses look to provide BioSig's clinical partners with quick remote access to technical experts who can assist with servicing the unique hardware and software of the PURE EP™ System. This step should enable our clinical field team to support the growing number of clinical sites utilizing PURE EP™ without the need for on-site visits.

ADVANCING OUR NEUROSTIMULATION INITIATIVE

Our NeuroClear division is developing a novel sensing and stimulation technology to optimize existing neurostimulation therapies and develop novel solutions to diagnose and treat physiological and neurological disorders that include resistant hypertension, arthritis, chronic pain, complex regional pain syndrome (CRPS), and neuralgia.



The current neurostimulation market is predicted to grow at 11.2% CAGR and is expected to reach USD 12.2 billion by 2024.³ The market is driven primarily by deep brain stimulation (Parkinson's Disease and Essential Tremor), spinal

cord stimulation, and renal denervation (RDN). Our NeuroClear team is looking to advance these therapies and develop novel treatment protocols for a host of other disorders through a differentiated value proposition of our platform technology.

Our initial focus is on improving therapies through clearer electroneurogram recordings, starting with enhancing the safety and efficacy of renal denervation procedures. Renal denervation has proven to be effective in reducing hypertension, but clinical endpoints remain suboptimal. There are over 10 million people that suffer from hypertension, and over half of all diagnosed patients are not responding to their medical therapy within a year of initiating the treatment. The renal denervation device market is expected to reach USD 7 billion by 2021, growing at 23.7% CAGR.⁴

The N-SENSE™, our flagship nerve mapping technology, aims to deliver a more significant reduction in ambulatory blood pressure by introducing a feedback loop for optimal ablation outcomes. Please visit our website www.neurocleartech.com for more information about our mission and our product.

In December 2020, we signed a research agreement with the University of Minnesota. The objective of this partnership is to develop novel therapies to treat sympathetic nervous system disease. Guided by the program studies' findings, we intend to develop new intellectual properties and products, including new hardware and software, with the support of a tier 1 US-based manufacturing partner and take it through FDA approval, manufacturing, and commercialization.

The U.S. Patent Office recently awarded our subsidiary a utility patent that we exclusively licensed from

³ Bioelectronic Medicine: 2019-2029. IdTechEx report, Dr. Nadia Tsao

⁴ iHealthcareAnalyst, Inc., February 2020



the Mayo Foundation for Medical Education and Research. This patent titled "Systems and Methods for Electroporation" describes and claims methods for improving hypertension treatments via electroporation. Electroporation is an emerging technique that has demonstrated efficacy in treatments for several critical conditions, most notably cancer, and is currently being evaluated for the treatments of autonomic nervous disorders.

With world-class research and clinical leadership from the University of Minnesota and Mayo Clinic, a growing intellectual portfolio, and a strong manufacturing partnership, we look forward to advancing one of the fastest-growing sectors in the medical device market.

STRONG BALANCE SHEET TO SUPPORT COMMERCIAL GROWTH

Our balance sheet remains robust with \$28.3 million in cash, cash equivalent, and short-term investments as of December 30, 2020. Therefore, we believe that we are well-positioned for 2021.

EXECUTION IS OUR NUMBER ONE PRIORITY

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We believe that the PURE EP™ is one of the most significant signal processing advancements in over 20 years.

Our technology addresses long-standing limitations that slow and disrupt cardiac catheter ablation procedures through its unique hardware design and software architecture.

We are pleased with the progress of our early efforts in neurostimulation and the promise of the opportunities they offer.

We believe that the relentless work that everyone in our Company has put into advancing our engineering, clinical and commercial efforts is finally coming to fruition. There is no better feeling than seeing a physician smile and hear them talk about the impact our technology has made on their procedure and, ultimately, on their patients' quality of life. We are determined to bring our technology to as many centers as we can, both large and small, and help the physicians elevate the standards of care.

We are proud of the progress we have made and are excited about the future. Thank you for your continued support.

With best wishes,

Kenneth L. Londoner, Chairman & CEO

Kenneth L. Londoner





SAFE HARBOR DISCLOSURE

This Shareholder Letter contains "forward-looking statements." Such statements may be preceded by the words "intends," "may," "will," "plans," "expects," "anticipates," "projects," "predicts," "estimates," "aims," "believes," "hopes," "potential" or similar words. Forward-looking statements are not guarantees of future performance, are based on certain assumptions, and are subject to various known and unknown risks and uncertainties, many of which are beyond the Company's control, and cannot be predicted or quantified and consequently, actual results may differ materially from those expressed or implied by such forward-looking statements. Such risks and uncertainties include, without limitation, risks and uncertainties associated with (i) the geographic, social, and economic impact of COVID-19 on our ability to conduct our business and raise capital in the future when needed, (ii) our inability to manufacture our products and product candidates on a commercial scale on our own, or in collaboration with third parties; (iii) difficulties in obtaining financing on commercially reasonable terms; (iv) changes in the size and nature of our competition; (v) loss of one or more key executives or scientists; and (vi) difficulties in securing regulatory approval to market our products and product candidates. More detailed information about the Company and the risk factors that may affect the realization of forward-looking statements is set forth in the Company's filings with the Securities and Exchange Commission (SEC), including the Company's Annual Report on Form 10-K and its Quarterly Reports on Form 10-Q. Investors and security holders are urged to read these documents free of charge on the SEC's website at http://www.sec.gov. The Company assumes no obligation to publicly update or revise its forward-looking statements as a result of new information, future events or otherwise.